



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

269T9312-3
Job Sheet 181451



Part No: 269T9312-3

Job Qty: 21 ea

Part Name: Wrench Inst.Nut



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/26/18

Job Tracking No:

Due Date: 9/7/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 269T9312 REV:5 IPP REV A 18.07.25 NEW ISSUE RQ VERIFIED BY DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	21 Ea		9/7/18	0.00	0.00	Start Up Waterjet2		
100	Waterjet	21 pcs		9/7/18	0.08	5.25	Waterjet 2 OMAX		
110	QC	21 pcs		9/7/18	0.00	0.00	QC2 Waterjet-4		
120	Mill Conv	21 pcs		9/7/18	0.75	5.25	Mill Conv 2		
130	QC	21 pcs		9/7/18	0.00	0.00	QC2 Machining-5		
140	QC	21 pcs		9/7/18	0.00	0.00	QC8 Machining-5		
150	Small Fab	21 pcs		9/7/18	0.25	1.75	Small Fab-9		
160	QC	21 pcs		9/7/18	0.00	0.00	QC5		
190	Outsource	21 pcs		9/7/18	0.00	0.00	Outsource1		
220	Outsource	21 pcs		9/7/18	0.00	0.00	Outsource13		
230	Packaging	21 pcs		9/7/18	0.00	0.00	Packaging2		
240	QC	21 pcs		9/7/18	0.00	0.00	QC6		
250	Packaging	21 pcs		9/7/18	0.00	0.00	Packaging3-2		
260	QC21-SA	21 Ea		9/7/18	0.00	0.00	QC21		

Part Op 120 - -Drill + tap -Chamfer

Descriptions: 150 - -Bend and engrave

190 - 1--Issue P/O to Meteor ; P/O 041156 RC 36-42 2-Bead blast 3- Certificate of Conformity is required

NOTE DROP SHIP TO FINISHER Meteor to ship directly to Groupe Altech.

220 - -Issue P/O to Groupe Altech: P/O 041236 -Zinc plate, BLACK ZINC PER ASTM B633 TY II SC 2 - Certificate of Conformity is required

230 - Receive

250 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-0.250	AlSi 4140 / 4142 Steel Sheet 0.250"W	6.3357 sf (.3017 ea)	90-Start up Operation	

M4130NS-250

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140-S-0.250	6	11	0

Part Specifications

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>			Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																											
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Date : _____	QTY Effective : _____		MRB (QSI042) Approval																																																											
Description Work Order Deviation Container No: S100142 Part: 269T9312-3 Job No: 181451 Serial No/Batch: S100142 Revision: 5 Inspector: _____ Exp Date: _____ Instructions: _____ Date: 08/08/18			Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																											
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Specifications could not be found.

Plex 7/26/18 12:36 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
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OTHER : _____					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

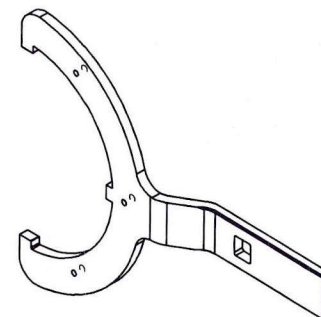
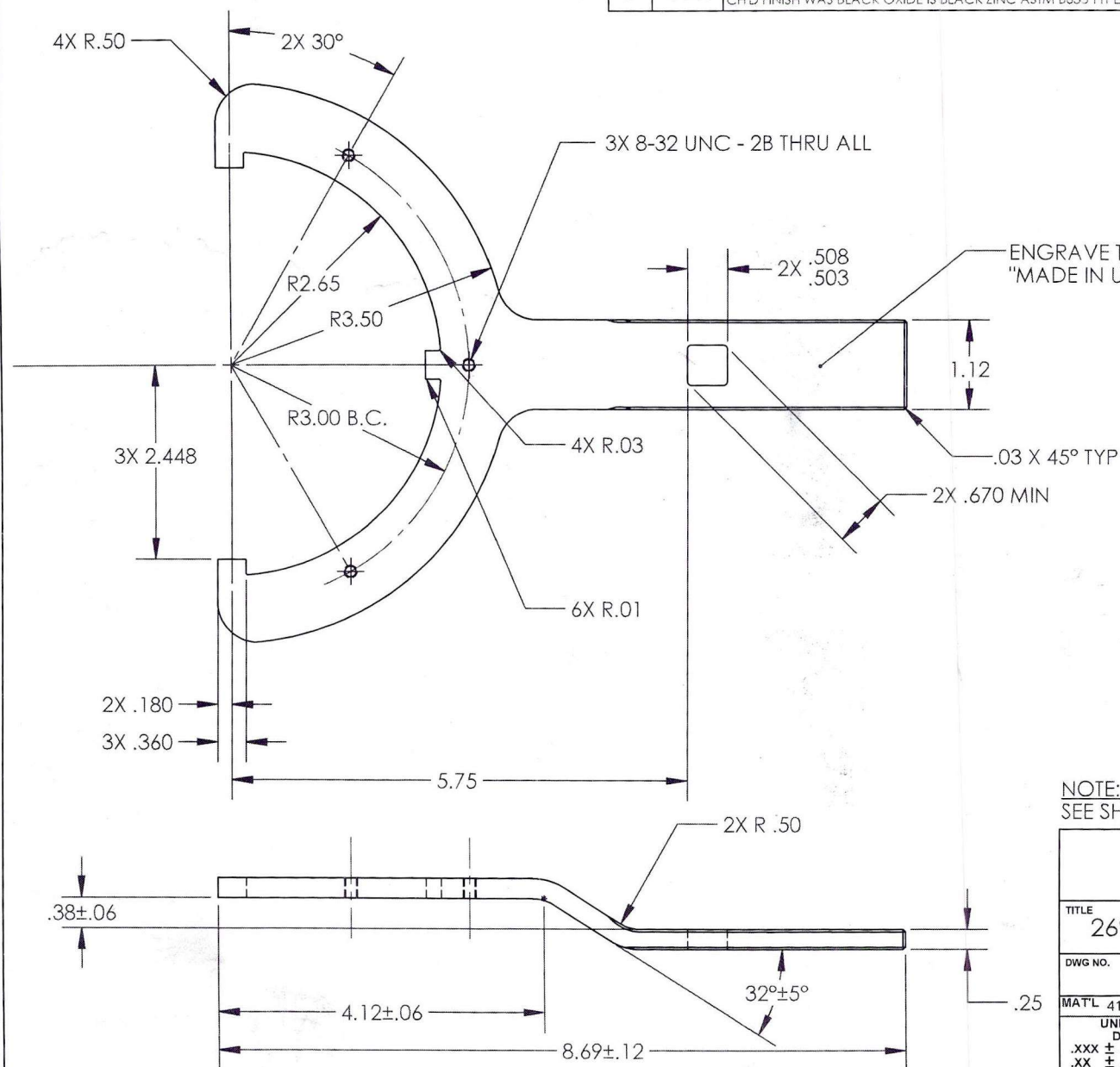
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REVISIONS					DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION					
5	15-0296	-3 ADDED DIM 2X .670 MIN. CH'D DIM WAS 2X .503-.511 IS 2X .503-.508. DELETED DIM 4X R.02 MAX. CH'D FINISH WAS BLACK OXIDE IS BLACK ZINC ASTM B633 TYPE II SC2.			9/11/2015	DPD	JAG



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 181457 MWS
1807-26

NOTE:
SEE SHEET 3 FOR FLAT PATTERN

DART AEROSPACE	
TITLE 269A1315 NUT INSTALLATION WRENCH	
DWG NO. 269T9312-3	REV 5
MAT'L 4130/4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Weil</i>
.XXX ± .010	HEAT TREAT RC 36-42
.XX ± .03	FINISH BLACK ZINC
.X ± .1	SPEC ASTM B633 TYPE II SC 2
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	269
SCALE 1:2	DATE 1/18/2012
SHEET 2 OF 4	

WRENCH

1100-430

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

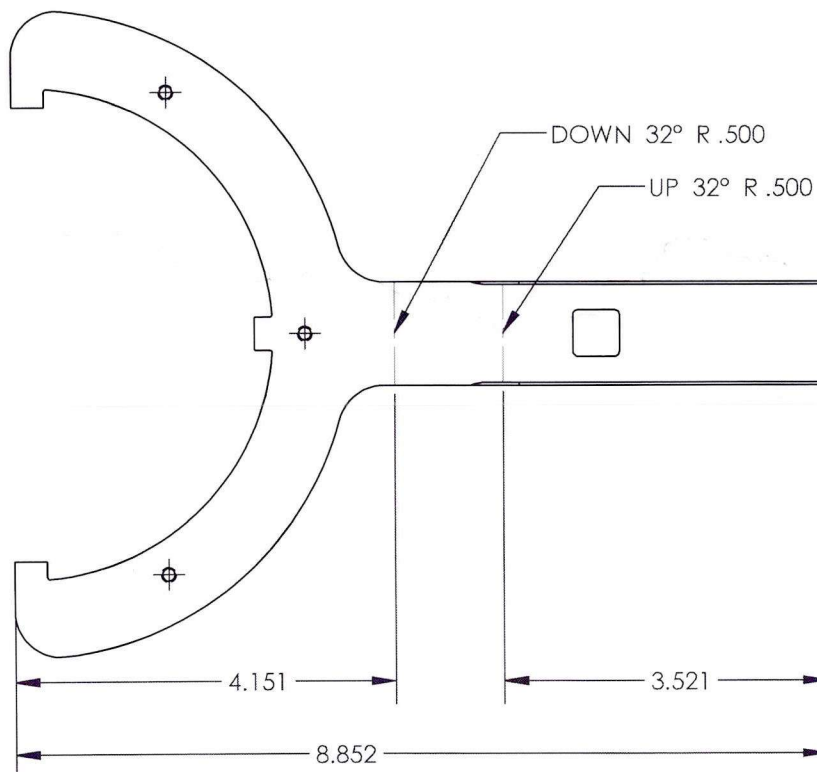
QA Closed: _____ Date: _____

Work Order update only ☐

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OTHER : _____					

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



FLAT PATTERN
FOR REFERENCE ONLY

(-3)

WRENCH

.25

NOTE:
SEE SHEET 2 FOR FOLD DETAIL.

DART AEROSPACE	
TITLE 269A1315 NUT INSTALLATION WRENCH	
DWG NO. 269T9312-3	REV 5
MAT'L 4130/4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	269
SCALE 1:2	DATE 1/18/2012
SHEET 3 OF 4	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041156**

Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S R14 Canada
Phone: 866 257 6395

PO No: PO041156
PO Date: 9/26/18
Due Date: 10/4/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		269T9312-3	Wrench Inst.Nut 1--Issue P/O to Atlantic Heat Treat; P/O _____ RC 36-42 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic to ship directly to Groupe Altech.	Firmed	-	10/4/18	22 pcs	0 pcs	22 pcs	\$6.3636/pcs	\$140.00

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Line Item Note We need a 24 hour turn around
Please skip annealing process if part is unlikely to crack.

THANK YOU!!

Grand Total: \$140.00

Shipping Ticket

Sold To: 1448
DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Page 1 of 1

Ship To: 156032
DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
PO041156 ✓				

Quantity	Part No. / Part Name / Part Description	Pounds
----------	---	--------

22 PCS MATERIAL 4140 PH
ANNEAL AND HARDEN TO 36-42 RC
SANDBLAST, C of C, PART #269T9312-3 ✓

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

Shipped Complete

Quantity Shipped:

22 ✓

Pounds Shipped:

24.00

Order No.: 158891

Shipped Complete

Quantity Shipped:

22.00

Received By:

Date:

Pounds Shipped:

24.00

Sold To: DART AEROSPACE LTD.

Shipped ON: 09/27/2018

Certification

Date: 10/02/2018

Entry Date: 09/27/2018

Page: 1 of 1

To:

DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: PO041156 ✓

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 4140

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
22 ✓	22 PCS MATERIAL 4140 PH ANNEAL AND HARDEN TO 36-42 RC SANDBLAST, C of C, PART #269T9312-3 ✓	24

Insp. Type	Scale	Minimum	Maximum	Number	Other
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Customer Requirements:

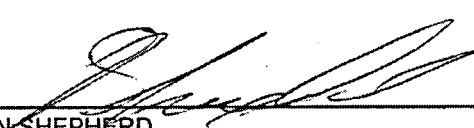
Harden rockwell

Results:

Harden ROCKWELL 36. 42. 42. TESTED AS PER SAMPLING PLAN

ANNEALED AND HARDEN TO 42 RC AS PER CUSTOMER'S REQUEST

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY): ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER. IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE OF CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEANE SHEPHERD
QUALITY CONTROL

ATLANTIC HEAT TREATING 2001 LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041236**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041236
PO Date: 10/3/18
Due Date: 10/9/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		269T9312-3	Wrench Inst.Nut -Issue P/O to Groupe Altech: P/O -Zinc plate, BLACK ZINC PER ASTM B633 TY II SC 2 - Certificate of Conformity is required	Firmed	-	10/9/18	22 pcs	0 pcs	22 pcs	\$5.454545/pcs	\$120.00

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Line Item Note Another rush, please advise on fastest ETA :(

Grand Total: \$120.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/3/18 2:17 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(013218-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

013218 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.				
05-Oct-2018		Aman			041236				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Quantités / Quantities Qté NC/ NC Qty		Qté Scrap/	À venir / Back Order
1	269T9312-3 Rev.	269T9312-3 ZINC BLACK PER ASTM B633 TY II SC 2	ZINC CH	22	22	0		0	0

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Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.